MOLECULAR AND CELLULAR ENDOCRINOLOGY

Volume 102, Nos. 1,2 June 1994

*Cited in Biological Abstracts; Current Awareness in Biological Sciences (CABS); Current Contents / Life Sciences; Excerpta Medica (EMBASE); Index Medicus; Informedicus; Pascal M*

CONTENTS

*Regular Papers*

Loss of biological activity of human chorionic gonadotropin (hCG) by the amino acid substitution on the "CMGCC" region of the $\alpha$-subunit
T. Kikuchi, M. Koyama, K. Miyai, T. Kimura, N. Nishikiori, T. Kimura, C. Azuma, M. Kusunoki, F. Saji and O. Tanizawa (Japan) 1

Hormonal regulation of HSP27 expression in human endometrial epithelial and stromal cells
M.L. Padwick, M. Whitehead and R.J.B. King (UK) 9

Expression of calbindin-$D_{9k}$ in the early pregnant rat uterus: effects of RU 486 and correlation to estrogen receptor mRNA
J. Krisinger, T. Setoyama and P.C.K. Leung (Canada) 15

The effect of nitric oxide donors on insulin secretion, cyclic GMP and cyclic AMP in rat islets of Langerhans and the insulin-secreting cell lines HIT-T15 and RINm5F
J.M. Cunningham, J.G. Mabley, C.A. Delaney and I.C. Green (UK) 23

Regulation of GAD expression in islets of Langerhans occurs both at the mRNA and protein level
L.A. Velloso, E. Björk, A.E. Ballagi, K. Funa, A. Andersson, O. Kämpe, F.A. Karlsson and D.L. Eizirik (Sweden) 31

A limited cytoplasmic region of the prolactin receptor critical for signal transduction
M. Edery, C. Levi-Meyrueis, J. Paly, P.A. Kelly and J. Djiane (France) 39

Synthetic progestins induce proliferation of breast tumor cell lines via the progesterone or estrogen receptor
E. Kalkhoven, L. Kwakkenbos-Isbrücker, S.W. De Laat, P.T. Van der Saag and B. Van der Burg (Netherlands) 45

Involvement of cAMP and cGMP in the mode of action of molt-inhibiting hormone (MIH) a neuropeptide which inhibits steroidogenesis in a crab
B. Saïdi, N. De Bessé, S.G. Webster, D. Sedlmeier and F. Lachaise (France, UK, Germany) 53

Ontogeny of the inhibitory guanine nucleotide-binding regulatory protein in the rat testis: mRNA expression and modulation of LH and FSH action
V. Eskola, A. Rannikko, I. Huhtaniemi and D.W. Warren (Finland, USA) 63

Insulin-like growth factor-I receptors in ovarian granulosa cells: Effect of follicle size and hormones
L.J. Spicer, E. Alpizar and R.K. Vernon (USA) 69

Production of antibodies to the human thyrotropin receptor and their use in characterising eukaryotically expressed functional receptor
E. Harfst, M.S. Ross, S.S. Nussey and A.P. Johnstone (UK) 77

Second messenger regulation of mouse gonadotropin-releasing hormone gene expression in immortalized mouse hypothalamic GT1–3 cells
K.-L. Yu, T.T.S. Yeo, K.-W. Dong, M. Jakubowski, C. Lackner-Arkin, M. Blum and J.L. Roberts (USA) 85

Characterization of the 5′ flanking region of the human follicle-stimulating hormone receptor gene
J. Gromoll, B. Dankbar and T. Gudermann (Germany) 93

TRH-evoked entry of extracellular calcium in $GH_4C_1$ cells: possible importance of arachidonic acid metabolites
K. Törnquist, E. Ekokoski and L. Forss (Finland) 103

Differential binding and activation of thyroid hormone response elements by $TR_{\alpha 1}$ and $RXR_{\alpha}$-trap heterodimers
T. Miyamoto, S. Suzuki and L.J. DeGroot (USA) 111

*(continued on page 3 of cover)*

0303-7207(199406)102:1/2;1-Y

# MOLECULAR AND CELLULAR ENDOCRINOLOGY

**Subscription Information:** *Molecular and Cellular Endocrinology* (ISSN 0303-7207). For 1994 vols. 98–106 are scheduled for publication; vol. 98/1 appeared in 1993 but remains the first issue of the 1994 subscription year. Subscription prices are available upon request from the Publisher. Subscriptions are accepted on a prepaid basis only, unless different terms have been previously agreed upon. Subscription orders can be entered only by calendar year (Jan.–Dec.) and should be sent to Elsevier Science Ireland Ltd., Customer Relations Manager, Bay 15, Shannon Industrial Estate, Shannon, Co. Clare, Ireland, tel. (+353-61)471944; fax (+353-61)472144, or to your usual subscription agent. Postage and handling charges include surface delivery except to the following countries where air delivery by SAL (Surface Air Lift) mail is ensured: Australia, Canada, Japan and the USA. For all other countries airmail rates are available upon request. Claims for missing issues should be made within six months of our publication (mailing) date, otherwise they cannot be honoured free of charge.
**In the USA and Canada:** For further information on this and other Elsevier journals please contact: Elsevier Science Inc., Journal Information Center, 655 Avenue of the Americas, New York, NY 10010, USA, tel. (212)6333750; fax (212)6333764; telex 420-643 AEP UI.
**Back volumes:** Please contact the Publisher.

**Information for Advertisers**
Advertising orders and enquiries can be sent to the Advertising Manager, Elsevier Science B.V., Advertising Department, P.O. Box 211, 1000 AE Amsterdam, The Netherlands, Tel.: 20–515.3220; Fax: 20–683.3041, attn. Advertising Dept.
Great Britain: T.G. Scott & Son Ltd., Portland House, 21 Narborough Road, Cosby, Leicestershire LE9 5TA, Tel.: 0533–753.333; Fax: 0533–750.522, attn. Tim Blake.
U.S.A. & Canada: Weston Media Associates, Daniel Lipner, P.O. Box 1110, Greens Farms, CT 06436-1110, Tel.: 203–261.2500, Fax: 203–261.0101.

*Contents (continued)*

Pioglitazone promotes insulin-induced activation of phosphoinositide 3-kinase in 3T3-L1 adipocytes by inhibiting a negative control mechanism
K.M. Sizer, C.L. Smith, C.S. Jacob, M.L. Swanson and J.E. Bleasdale (USA) 119
IGF-I-Induced IGFBP-3 potentiates the mitogenic actions of IGF-I in mammary epithelial MD-IGF-I cells
D. Romagnolo, R.M. Akers, J.C. Byatt, E.A. Wong and J.D. Turner (USA, Canada) 131
In vitro approach to the control of spermatogonia proliferation in the trout
M. Loir (France) 141
Sequence and regulation of European eel prolactin mRNA
B. Quérat, B. Cardinaud, A. Hardy, B. Vidal and G. D'Angelo (France) 151
Isolation and characterization of a monoclonal human thyroid peroxidase autoantibody of lambda light chain type
M.F. Prummel, S. Portolano, G. Costante, B. Rapoport and S.M. McLachlan (USA) 161
Inhibition of $H_2O_2$ production by iodoaldehydes in cultured dog thyroid cells
V. Panneels, H. Van den Bergen, C. Jacoby, J.C. Braekman, J. Van Sande, J.E. Dumont and J.M. Boeynaems (Belgium) 167

*Calendar* 177

*Rapid Papers*
Mechanism of antiandrogen action: conformational changes of the receptor
C.W. Kuil and E. Mulder (Netherlands) R1
The human melanocyte stimulating hormone receptor has evolved to become "super-sensitive" to melanocortin peptides
K.G. Mountjoy (USA) R7

*Notes to Authors*

PRINTED IN IRELAND